




# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,643	03/31/2005	Tsutomu Inuzuka	043890-0725	1391
20277	7590	04/10/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			BAISA, JOSELITO SASIS	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/529,643	Applicant(s) INUZUKA, TSUTOMU	
	Examiner Joselito Baisa	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/31/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. [4696100] in view of Estival et al. [3509058].

Yamamoto et al. disclose a rod-shaped insulator 1 of magnetic ferrite; a conducting coil 5 formed around the insulator; two external electrodes 11 and 12 connected to the conducting coil [Col. 5, Lines 36-49, Figure 9]. Yamamoto et al. disclose the claimed invention except for the sintered insulator made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to ZnO; and cobalt oxide.

Estival et al. disclose a sintered insulator made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to ZnO; and cobalt oxide [Col. 2, Lines 15-44].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the insulator of Estival et al. to the inductor of Yamamoto et al.

Art Unit: 2832

The motivation would have been because of suitability of these classes of materials for manufacturing magnetic cores used at high frequencies [Col. 1, Lines 30-35].

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama et al. [6076253] in view of Estival et al. [3509058].

Takayama et al. disclose an insulator 2; a conducting coil 1 in a spiral shape inside the insulator; and two external electrodes 3 and 3 connected to the conducting coil. Takayama et al. disclose the claimed invention except for the insulator is a sintered magnetic ferrite made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide.

Estival et al. disclose a sintered insulator made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide [Col. 2, Lines 15-44].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the insulator of Estival et al. to the inductor of Takayama et al.

The motivation would have been because of suitability of these classes of materials for manufacturing magnetic cores used at high frequencies [Col. 1, Lines 30-35].

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. [6718625] in view of Estival et al.

Ito et al. disclose a ring-shaped magnetic ferrite core 23t; two conducting coils 31 and 32 wound in the same direction around the core; and four external electrodes 41a, 41b, 42a, and 42b connected to the coils [Col. 9, Lines 5-32, Figure 13; Col. 10, Lines 20-25, Figure 13]. Ito et al. disclose the claimed invention except for the core is a sintered magnetic ferrite made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide.

a. Estival et al. disclose a sintered core made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide [Col. 2, Lines 15-44].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the insulator of Estival et al. to the inductor of Ito et al.

The motivation would have been because of suitability of these classes of materials for manufacturing magnetic cores used at high frequencies [Col. 1, Lines 30-35].

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over So [6222506] in view of Estival et al.

Art Unit: 2832

So discloses a cylindrical magnetic core 117; a conducting coil 115 spirally wound around the cylindrical core; and a threaded connecting section 109 on one end of the core [Col. 3, Lines 19-35, Figure 6]. So discloses the claimed invention except for the core is a sintered magnetic ferrite made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide.

Estival et al. disclose a sintered core made by firing mixed powder. Main ingredients of the mixed powder including: 41 to 50 mol % of iron oxide when converted to  $\text{Fe}_2\text{O}_3$ ; 3 to 16 mol % of zinc oxide when converted to  $\text{ZnO}$ ; and cobalt oxide [Col. 2, Lines 15-44].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the insulator of Estival et al. to the inductor of Ito et al.

The motivation would have been because of suitability of these classes of materials for manufacturing magnetic cores used at high frequencies [Col. 1, Lines 30-35].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joselito Baisa  
Examiner  
Art Unit 2832

jsb

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
04/03/09